

Date: Thursday, 27/11/2008 2:37:14 PM  
 User: Julie Dawson

## Process Sheet

<b>Customer</b> :	CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> :	BEARPAW KIT (23"X19")
<b>Job Number</b> :	43827		
<b>Estimate Number</b> :	12619		
<b>P.O. Number</b> :		<b>Part Number</b> :	D105645011
<b>This Issue</b> :	27/11/2008	<b>S.O. No.</b> :	
<b>Prsht Rev.</b> :	NC	<b>Drawing Number</b> :	D2421 REV F2
<b>First Issue</b> :	1/1	<b>Project Number</b> :	N/A
<b>Previous Run</b> :	41325	<b>Drawing Revision</b> :	F2
	<b>Type</b> :	<b>Material</b> :	
	MACHINED PARTS	<b>Due Date</b> :	04/12/2008
<b>Written By</b> :		<b>Qty:</b>	2 Um: Each
<b>Checked &amp; Approved By</b> :	JLD 08.11.27		
<b>Comment</b> :	Est Rev:A New Issue 07-01-03 JLM		
	Est Rev:B New Manufacturing Method 08-11-04 Verified By:EC		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

JLD 08/12/03

(1) D105-645-011 Kit consists of Qty (2) D2421

Photocopy bluefile and create labels per PPP D105-645-011 CHG003

S 09/01/12

2.0	MFG ENGINEERING	MFG ENGINEERING
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Comment: MFG ENGINEERING

Program Batch Number

JLD 08.11.28

3.0	MUHMWB10	UHMW 1" Black
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Comment: Qty.: 6.8404 sf(s)/Unit Total: 13.6809 sf(s)

Cut 2 blanks per (1) K10010 Kit

Cut blank: 19.50" x 23.50" x 1.00" thick (+0.030/-0.000) per DSK086-4

Material: Black UHMW 1"

(MUHMWB10)

Batch:

109186 1B 8-12-3

(4)

4.0	WATER JET	FLOW WATER JET
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1B 8-12-3

Comment: FLOW WATER JET

Cut Blank as per file D2421\_BLANK

5.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

Note: (2) bearpaws for (1) Kit

JL 09/01/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 27/11/2008 2:37:14 PM  
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARPAW KIT (23"X19")

Job Number: 43827

Part Number: D105645011

Job Number:



Seq. #:

Machine Or Operation:

Description :

1-Inspect material for defects or damage prior to machining

2-Machine as per Folio FA124 and Dwg D2421  
Identify as D2421

3-Deburr

JL 09/01/11

6.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

JL 09/01/11

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

J.F. 09/01/11

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

9.0

D2182B060

Clamp Cushion



Comment: Qty.: 4.0000 Each(s)/Unit Total: 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 D2182B060 Rubber Cushion

B42737

56

10.0

D2274

Radius Block



Comment: Qty.: 8.0000 Each(s)/Unit Total: 16.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 D2274 Radius Block

B42099

50

11.0

D2519

Clamp



Comment: Qty.: 4.0000 Each(s)/Unit Total: 8.0000 Each(s)

Clamp

Pick: Packing Kit

(Note: D2421 is on the BOM as material from step 3)

Qty Part Number Description Batch

4 D2519 Clamp

B41430

01/1/12

50

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARPAW KIT (23"X19")

Job Number: 43827

Part Number: D105645011

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

D2529

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch  
8 D2529 Washer 1542408

50

13.0

AN415A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch  
8 AN4-15A Bolt M109148

50

14.0

AN960JD416

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch  
8 AN960JD416 Washer M109249

50

15.0

MS21042L4

Nut



Comment: Qty.: 8.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch  
8 MS21042L4 Nut (or -4) M108145

9/1/12

50

16.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

8 09/01/12 (x2)

17.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D105-645-011

Location: 11 Rev A

9/1/12

2X

50

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 27/11/2008 2:37:14 PM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARPAW KIT (23"X19")

Job Number: 43827

Part Number: D105645011

Job Number:



Seq. #:

Machine Or Operation:

Description :

18.0

QC21

FINAL INSPECTION/W/O RELEASE



09/01/13 *JD*

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



*MF 09-01-12*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 43827
<b>Description:</b> Bearpaw		<b>Part Number:</b> D2421
<b>Inspection Dwg:</b> D2421	<b>Rev:</b> F2	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST




☒ First Article ☐ Prototype

Inspection Sheet	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A	0.20	+/-0.030	.201	✓			
B	0.95	+/-0.030	.945	✓			
C	0.45	+/-0.010	.440	✓			
D	0.07 x 45°	+0.030/-0.010	.075 x 45°	✓			
E	0.69	+/-0.030	.685	✓			
F	0.38	+/-0.010	.383	✓			
G	0.44 - 0.47	+/-0.000	.445	✓			
H	R0.25	+/-0.030	r.250	✓			
I	0.19 x 45°	+/-0.030	.220 x 45°	✓			
J	23.00	+/-0.030	23.00	✓			
K	Ø0.260	+0.005/-0.000	.260	✓			
L	Ø0.93	+/-0.030	.925	✓			
M	0.30	+/-0.030	.310	✓			
N	4.50	+/-0.030	4.515	✓			
O	9.50	+/-0.030	9.500	✓			
P	1.00	+/-0.030	1.00	✓			
Q	14.750	+/-0.010	14.750	✓			
R	0.38	+/-0.030	.376	✓			
S	4.54	+/-0.010	4.540	✓			
T	19.00	+/-0.030	19.00	✓			

<b>Measured by:</b> J.L.	<b>Audited by:</b> J.F.	<b>Prototype Approval:</b> N/A
<b>Date:</b> 09/01/11	<b>Date:</b> 09/01/11	<b>Date:</b> N/A

Rev	Date	Change	Revised by	Approved
A	03.09.22	New Issue P/O K10010	KJ/RF	
B	04.11.29	Revised dimension M	KJ/JLM	



DESIGN 		DRAWN BY 		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED RF		APPROVED 		DRAWING NO. D2421 REV. F SHEET 1 OF 2	
DATE 01.03.12		TITLE BEARPAW SCALE 1:7			
A	95.04.24	NEW ISSUE			
B	95.11.28	CHANGED NUMBER OF HOLES			
C	97.06.19	ADDED MATERIAL SPECIFICATION			
D	98.08.11	DIM MODIFICATIONS			
E	00.03.01	R1.77 WAS R2.66; ADD R1.85 BORE RELIEF FOR CLAMPS; ADDED DEO 9155			
F	01.03.12	MODIFY FWD END			
F1	<del>03.01.13</del>	<del>Ø 0.93 WAS Ø 0.75; R0.19 WAS R0.38;</del> Ø 0.19 WAS 0.25			
F2	<del>04.11.03</del>	0.30 WAS 0.40 ; 0.650 WAS 0.55			

Technical drawing of a mechanical part, likely a bracket or support, showing front and side views with dimensions and tolerances.

**Top View (Left):**

- Overall width: 15.75
- Overall height: 11.50
- Top edge radius: R0.75
- Inner corner radius: R0.50 (TYP)
- Bottom edge radius: R0.38 (TYP)
- Section line A-A

**Top View (Right):**

- Overall width: 11.50
- Overall height: 11.50
- Top edge radius: R0.75
- Inner corner radius: R0.50 (TYP)
- Bottom edge radius: R0.38 (TYP)
- Section line A-A

**Front View (Bottom):**

- Overall width: 15.75
- Overall height: 11.50
- Top edge radius: R0.75
- Inner corner radius: R0.50 (TYP)
- Bottom edge radius: R0.38 (TYP)
- Section line A-A

**Side View (Right):**

- Overall width: 11.50
- Overall height: 11.50
- Top edge radius: R0.75
- Inner corner radius: R0.50 (TYP)
- Bottom edge radius: R0.38 (TYP)
- Section line A-A

**Dimensions and Tolerances:**

- Top edge radius: R0.75
- Inner corner radius: R0.50 (TYP)
- Bottom edge radius: R0.38 (TYP)
- Overall width: 15.75
- Overall height: 11.50
- Section line A-A

**Notes:**

- 0.010. (TYPICAL)
- SECTION AS ILLUSTRATED)
- 0.010. (TYPICAL)
- SECTION AS ILLUSTRATED)

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WORK ORDER  
NO. 43827

MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689,  
1.00" THICK (MACHINE TO 0.950)

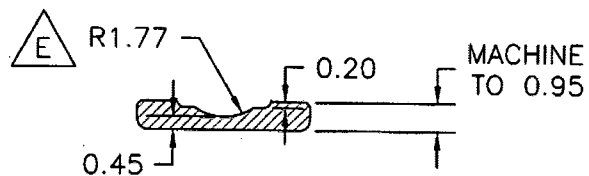
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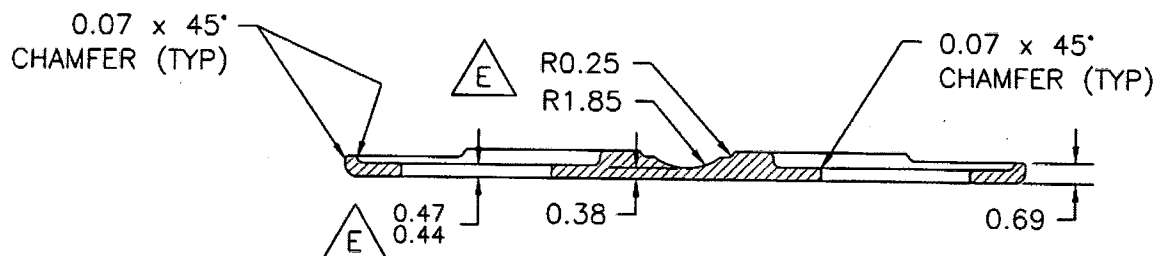


DESIGN #	DRAWN BY #	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED RF	APPROVED #	DRAWING NO. D2421	REV. F SHEET 2 OF 2
DATE 01.03.12		TITLE BEARPAW	SCALE 1:6

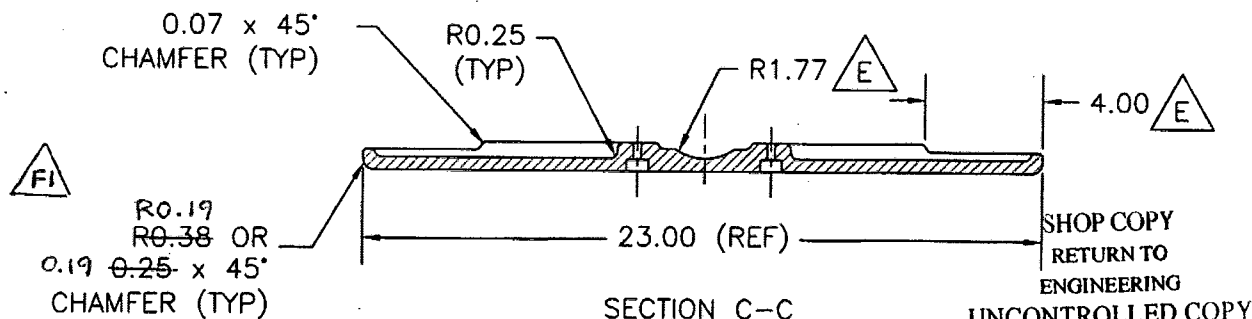
RELEASED  
01.03.14 #



SECTION A-A



SECTION B-B



SECTION C-C

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